

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/041503 A1(51) International Patent Classification⁷: B29C 45/16,
45/76(21) International Application Number:
PCT/US2003/033186

(22) International Filing Date: 17 October 2003 (17.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/422,784 31 October 2002 (31.10.2002) US(71) Applicant (for all designated States except US): OM-
NOVA SOLUTIONS INC. [US/US]; Legal Department,
175 Ghent Road, Fairlawn, OH 44333-3300 (US).

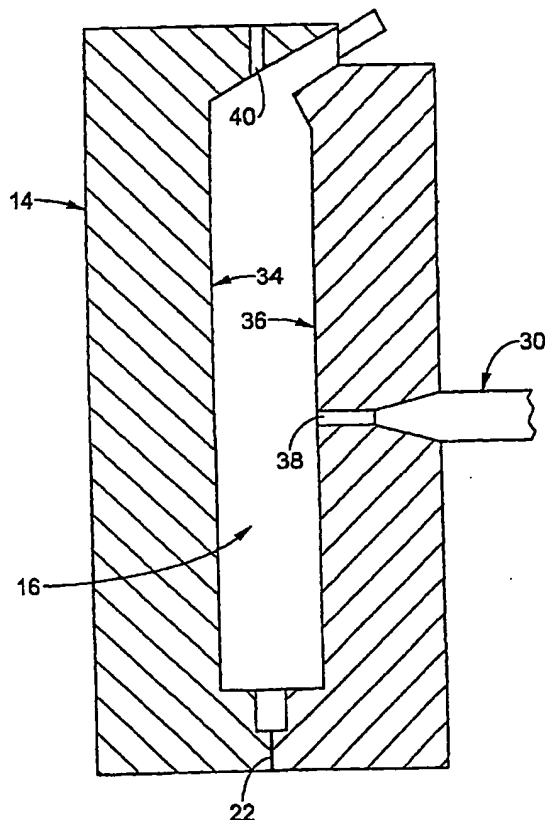
(72) Inventors; and

(75) Inventors/Applicants (for US only): MCBAIN, Douglas

[US/US]; 233 Fixler Road, Wadsworth, OH 44281 (US).
STRAUS, Elliott [US/US]; 2499 Auburn Place, Akron,
OH 44312 (US). THOMPSON, John [US/US]; 1578
Woodcrest Drive, Wooster, OH 44691 (US).(74) Agents: BURLESON, David et al.; Omnova Solutions
Inc., Legal Department, 175 Ghent Road, Fairlawn, OH
44333-3300 (US).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: DISPENSE AND CONTROL APPARATUS AND METHOD FOR COATING AN INJECTION MOLDED ARTICLE

(57) Abstract: A method of injection molding and in-mold coat-
ing an article is provided. A molten resin is injected into a mold-
ing cavity (16) until the molding cavity (16) is substantially filled.
The injected molten resins is allowed to cool in the molding cav-
ity (16) to form a molded article. A coating composition is in-
jected into the molding cavity (16) and onto the molded article
to in-mold coat the molded article when at least a surface to be
coated of the molded article has reaches a modulus sufficient to
support the coating composition.